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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,127	03/26/2004	Janet Stern-Berkowitz	I-2-0495.1US	8826

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EXAMINER

EKONG, EMEM

ART UNIT PAPER NUMBER

2688

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/810,127	Applicant(s) STERN-BERKOWITZ ET AL.	
	Examiner EMEM EKONG	Art Unit 2688	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,8-15 is/are rejected.
- 7) ☒ Claim(s) 3-7 and 16-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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1. Claims 1, 2, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,957,071 B1 to Balaji S. Holur et al. (Holur) in view of U.S. Patent No. 6006091 to Francis Lupien (Lupien).

Regarding claims 1 and 11, Holur discloses a method for allocating resources in a wireless communication system including a base station and a radio network controller (i.e. serving node) (abstract, col. 1 lines 12-35, col. 1 lines 46-55, and col. 2 lines 12-22), (method for managing wireless bandwidth resources, which includes the mobile unit, the base station, and the serving node) the method comprising the steps of:

receiving an allocation request for a new service at the RNC (col. 1 lines 57-63, col. 5 line 60-col. 6 line 4, and col. 6 lines 25-29), (receiving at a serving node a service request);

selecting resources by the RNC to allocate to the new service that takes into account the capabilities of the base station (col. 6 lines 29-51, and col. 15 lines 43-47), (initiating a session may involve allocating radio resources, establishing an RP session between the base station and the serving node); and

if a set of resources can be found that does not exceed the capabilities of the base station, then executing the allocation request by the RNC; else rejecting the allocation request by the RNC (col. 1 lines 26-35, col. 6 lines 48-56, and col. 15 line 44-col. 16 line 39), (base checks whether available resources will support requested service, and sends acknowledgement to serving node, serving node sends result to mobile unit for allowance or nonallowance).

However, Holur fails to specifically disclose a set of resources.

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Lupien discloses a set of resources (see table 3 and col. 1 lines 55-67, col.5 lines 45-56, and col. 7 lines 13-16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Holur, by selecting a set of resources by the RNC to allocate to the new service that takes into account the capabilities of the base station as taught by Lupien for the purpose of ensuring that the base station is capable of handling the requested service.

Regarding claim 2, the combination of Holur and Widegren disclose the method according to claim 1, wherein the selecting step includes: examining the capabilities of the base station during the selection of the resources and selecting resources that do not exceed the capabilities of the base station (col. 6 lines 45-53, and col. 15 lines 43-47), (the serving node has the base station to determine if the radio resources necessary for the session are available).

2. Claims 8, 9, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holur in view of Lupien as applied to claim 1 above, and further in view of U.S. Patent No. 6671512 B2 to Janne Laakso (Laakso).

Regarding claims 8, 9, 12, and 13, the combination of Holur and Lupien discloses the method according to claims 1 and 11, and analyzing the capabilities required to execute the allocation request. However, the combination fails to disclose further comprising the step of: providing the RNC with a list of the capabilities of the base station (claims 8 and 12);

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and providing step includes sending a configuration file to the RNC (claims 9 and 13).

Laakso discloses further comprising the step of: providing the RNC with a list of the capabilities of the base station (reads on claims 8 and 12); and providing step includes sending a configuration file to the RNC (reads on claims 9 and 13) (see col. 8 table, col. 11 lines 23-27, col. 11 line 60-col. 12 line 3), (AveTrxPower).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Holur, and Lupien with the teachings of Laakso, and have the base station sending configuration file and providing a list of the capabilities to the RNC for the purpose of efficiently allocating resources.

3. Claims 10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holur in view of Lupien as applied to claim 1 above, and further in view of Laakso as applied to claim 8 above, and further in view of U.S. Patent No. 6275695 B1 to Prem A. Obhan (Obhan).

Regarding claims 10 and 14, the combination of Holur, Lupien and Laakso discloses the method according to claims 8 and 12, however, the combination fails to disclose wherein the providing step includes downloading operation and maintenance data to the RNC.

Obhan discloses wherein the providing step includes downloading operation and maintenance data to the RNC (col. 10 lines 4-12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Holur, Lupien, and Laakso with the teachings of Obhan, and have the base station downloading operation and maintenance data to the RNC for the purpose that RNC knows if the maximum traffic capacity that can be handled by radio telecommunication network is or is not limited by the available radio resources.

4. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holur in view of Lupien, and further in view of U.S. Patent No. 6564067 B1 to Pascal Agin (Agin).

Regarding claim 15, Holur discloses a method for allocating resources to reduce processing requirements in a wireless communication system including a base station and a single radio network controller (i.e. serving node) (abstract, col. 1 lines 12-35, col. 1 lines 46-55, and col. 2 lines 12-22), (method for managing wireless bandwidth resources, which includes the mobile unit, the base station, and the serving node) the method comprising the steps of:

receiving an allocation request for a new service at the RNC (col. 1 lines 57-63, col. 5 line 60-col. 6 line 4, and col. 6 lines 25-29), (receiving at a serving node a service request);

selecting resources by the RNC to allocate to the new service that takes into account the capabilities of the base station (col. 6 lines 29-51, and col. 15 lines 43-47), (initiating a session may involve allocating radio resources, establishing an RP session between the base station and the serving node); and

executing the allocation request by the RNC if a set of resources can be found that does not exceed the capabilities of the base station, then executing the allocation request by the RNC; else rejecting the allocation request by the RNC (col. 1 lines 26-35, col. 6 lines 48-56, and col. 15 line 44-col. 16 line 39), (base checks whether available resources will support requested service, and sends acknowledgement to serving node, serving node sends result to mobile unit for allowance or nonallowance).

However, Holur fails to specifically disclose a set of resources. Lupien discloses a set of resources (see table 3 and col. 1 lines 55-67, col.5 lines 45-56, and col. 7 lines 13-16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Holur, by selecting a set of resources by the RNC to allocate to the new service that takes into account the capabilities of the base station as taught by Lupien for the purpose of ensuring that the base station is capable of handling the requested service.

However, Lupien fails to disclose staggering transmission time interval (TTI) starts and ends to spread the load on the base station between different frames.

Agin discloses transmission time interval (TTI) starts and ends (col. 3 line- col. 5 line 14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Holur, and Lupien, and have

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the transmission time interval (TTI) starts and ends for the purpose of spreading the load on the base station between different frames.

Allowable Subject Matter

5. Claims 3-7, and 16-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to wireless communication system:

U.S. Pat. No. 56931253 B1 to Hartikainen

U.S. Pat. No. 6282429 B1 to Baiyor

U.S. Pat. No. 6374112 B1 to Widegren

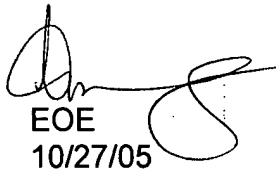
U.S. Pat. No. 6216006 B1 to Scholefield.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EMEM EKONG whose telephone number is 571 272 8129. The examiner can normally be reached on 8-5 Mon-Fri..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571 272 7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



EOE
10/27/05



NICK CORSARO
PRIMARY EXAMINER